



**UNITED STATES DEPARTMENT OF COMMERCE**  
**Pat nt and Trademark Office**

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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.
09/160,312	09/25/98	JINNO	Y 5586D-6921

MM91/0913  
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EXAMINER

PARKER, K

ART UNIT

PAPER NUMBER

2871

DATE MAILED:

09/13/01

**Please find below and/or attached an Office communication concerning this application or proceeding.**

**Commissioner of Patents and Trademarks**

**Office Action Summary**Application No.  
**09/160,312**Applicant(s)  
**Yushi et al**Examiner  
**Kenneth Parker**Art Unit  
**2871**

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136 (a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on Aug 20, 2001.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11; 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-15 is/are pending in the application.
- 4a) Of the above, claim(s) 7-14 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-6 and 15 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claims \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are objected to by the Examiner.
- 11) ☐ The proposed drawing correction filed on \_\_\_\_\_ is: a) ☐ approved b) ☐ disapproved.
- 12) ☐ The oath or declaration is objected to by the Examiner.

**Priority under 35 U.S.C. § 119**

- 13) ☒ Acknowledgement is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d).
- a) ☒ All b) ☐ Some\* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \*See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. § 119(e).

**Attachment(s)**

- 15) ☒ Notice of References Cited (PTO-892)                      18) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_\_
- 16) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)                      19) ☐ Notice of Informal Patent Application (PTO-152)
- 17) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s). \_\_\_\_\_                      20) ☐ Other:

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*Claim Rejections - 35 USC § 103*

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103© and potential 35 U.S.C. 102(f) or (g) prior art under 35 U.S.C. 103(a).

**5. Claims 165, 15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Mochizuki et al, U.S. Patent # 5,247,375 in view of Tanigushi et al, US patent #5,187,604, Ito et al, US Patent # 5,748,179, Kweon, US Patent # 5,811,318, and Wakagi et al, US Patent #5,777,702.**

The primary reference discloses:

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- A liquid crystal with a pair of substrates and liquid crystal between them, polarizing plates around the cell, TFT driving and switching circuits with the same structure.

The primary reference lacks: the indication that the terminals have a portion having a lamination structure similar to the TFTs.

The secondary references all show multilayer external circuits using the films used in the TFTs. The terminals required a multilayer structure for passivation, strength and conductivity, and so multiple layers were used. The references teach reasons of protection and moisture resistance. The TFT layers were used because they were there, and therefore there was no reason to add additional unnecessary layers, and for the reduction of patterning steps.

Therefore, it would have been obvious, in the devices and or methodologies taught by the primary reference, to employ the modification disclosed by the secondary reference for the benefit stated.

**6. Claims 1-6, 15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Shiraki et al, U.S. Patent # 5,671,026.**

The primary reference discloses:

- A liquid crystal with a pair of substrates and liquid crystal between them, polarizing plates around the cell, TFT driving and switching circuits with the same structure, and with

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protective circuits which have and overlap of the same metallizations as both of the drive and switching circuits. Therefore, these claims are anticipated by Shiraki et al.

The primary reference lacks: the indication that the terminals have a portion having a lamination structure similar to the TFTs.

The secondary references all show multilayer external circuits using the films used in the TFTs. The terminals required a multilayer structure for passivation, strength and conductivity, and so multiple layers were used. The references teach reasons of protection and moisture resistance. The TFT layers were used because they were there, and therefore there was no reason to add additional unnecessary layers, and for the reduction of patterning steps.

Therefore, it would have been obvious, in the devices and or methodologies taught by the primary reference, to employ the modification disclosed by the secondary reference for the benefit stated.

Still lacking from the disclosure is the explicit indication that the terminals are 8mm or more away from the driving circuits. Yamazaki shows the region with the driving portion a considerable distance away from the terminals (see cover figure). Even if this were not taken as an indication to form the terminals .8mm or more from the driving circuits, it was well known to employ sealants around the driving circuits, and therefore it would have been necessary to form the driving circuits a sufficient width away from the terminals to enable interposing elements which are required, such as sealants or other crossing lines.

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***Response to Arguments***

Applicant's arguments filed have been fully considered but they are not persuasive. Applicant has mainly argued that the instant invention is related to static protection, however the pending claim recite nothing that would significantly relate to static protection. The only feature used to relate to static protection is the double layer electrode, however, double electrodes, such as gate and source lines (which also were typically made of the same materials used for the TFT, as the lines were actually the TFT terminals) was extremely commonly done for a variety of reasons including resistance reduction and material protection, and which was disclosed in probably several hundred references (a sampling has been made of record), and for which there is currently two dedicated subclasses.

***Conclusion***

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

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Any inquiry concerning this communication or earlier communications from the examiner should be directed to Kenneth Parker whose telephone number is (703) 305-6202. The fax phone number for this Group is (703) 308-7722. Any inquiry of a general nature or relating to the status of this application or preceding should be directed to the Group receptionist whose telephone number is (703) 308-0956.

**September 10, 2001**

**KENNETH ALLEN PARKER  
PRIMARY PATENT EXAMINER  
GAU 2871**